REMARKS

At the outset, Applicants wish to thank the Examiner for indicating in the telephone message left with Applicants' attorney on March 11, 2008 that: (1) in the provisional double patenting rejection, the citation of Application No. 10/480,672, was a typographical error, and that the actual citation should be Application No. 10/480,762; and (2) the Rejection under 35 U.S.C. §112, second paragraph has been withdrawn.

By this amendment, claim 1 has been amended to recite that the metallocene catalysts of formula 1 are of the racemic form, and to more particularly point out that the 1-butene copolymers are isotactic, support for which can be found in the claim as filed and at page 6, line 8. Claim 18 is new, support for which can be found in claim 8. No new matter has been added as a result of this Amendment.

Included with this Response is a Supplemental Information Disclosure Statement. Applicants earnestly request that the Examiner consider the documents listed on the accompanying PTO-1449 form, and that they be made of record herein.

Claim Rejections

Double Patenting Rejections

Claims 1-10 have been provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of copending Application Number 10/480,672, and claims 1-6 of copending Application Number 10/536,858. In a telephone message left with Applicants' attorney on March 11, 2008, the Examiner indicated that the citation of Application No. 10/480,672 was a typographical error, and that the correct citation was Application No. 10/480, 762.

In response to the provisional rejections of claims 1-10 on the ground of nonstatutory obviousness-type double patenting, Applicants kindly request that the Examiner hold this rejection in abeyance since neither application has been allowed.

Rejections under 35 U.S.C. §112, second paragraph

Claims 1-10 have been rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for two recitations of the word "and" in claim 1. The Examiner indicated in a telephone message left on March 11, 2008 with Applicants' attorney, that this rejection has been withdrawn.

Rejections Under 35 U.S.C. § 103

A. Response to rejection of claims 1-10 under 35 U.S.C. 103(a) as being unpatentable over Vathauer in view of the '795 document.

In response to the rejection of claims 1-10 under 35 U.S.C. 103(a) as being unpatentable over Macromolecules 2000, 33, 1955-1959 of Vathauer et al. ("Vathauer") in view of GB 1,460,795 ("'795" document), Applicants respectfully submit that *prima facie* case of Obviousness has not been made out.

The U.S. Supreme Court in *Graham v. John Deere Co.*, 148 U.S.P.Q. 459 (1966) held that non-obviousness was determined under §103 by (1) determining the scope and content of the prior art; (2) ascertaining the differences between the prior art and the claims at issue; (3) resolving the level of ordinary skill in the art; and, (4) inquiring as to any objective evidence of non-obviousness. Accordingly, for the Examiner to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP §2142.

First, as acknowledged by the Examiner, Vathauer does not expressly teach the copolymerization of 1-butene. Applicants also respectfully submit that Vathauer's formulae (1) and (3) are not encompassed by the racemic metallocenes recited in the current process claims. Moreover, even with respect to catalyst 2, Vathauer teaches that the meso form of the catalyst is more active:

> The *meso*-forms of 1 and 2 are much more active than the corresponding *rac*-isomers (page 1956, left side, lines 7-9 below Table 2).

In fact, of the six catalysts tested, the *rac* form of catalyst 2 is only the fourth most active. (Table 1, page 1956). Finally, the *meso*-isomers of catalysts 1 and 2 are also more stable (page 1957, right side, lines 15-16). Therefore, for the above-stated reasons, there would be no predictability in choosing a *rac*-form metallocene for the claimed process at all, and even less predictability in particularly choosing catalyst 2. Vathauer itself describes the unpredictability of the use of the *rac* form:

> The most striking result is that if polymerizing α-olefins with the catalysts 1 and 2, the *meso*-compounds show a higher polymerization activity than the *rac*-forms of the metallocenes. This is remarkable because in the polymerization of propene the reaction rate of the *rac*-compound is higher than that of its *meso*-enantiomer (page 1955, right side, lines 14-20 below Abstract).

With respect to the '795 document, it relates to a multi-site ($TiCl_3$) catalyst in contrast to the single site metallocene catalysts recited in the present claims and in Vatheuer. Further, the '795 document teaches away from the isotactic materials recited in the current claims:

> As is known, films composed of highly isotactic polybutene-1 have the disadvantage that they have a low transparency, very different strength values in the longitudinal and transverse directions and therefore a poor resistance to tear propagation, as a result of which they are not suitable for many fields of use (page 1, left side, lines 14-21, emphasis added).
>
> In contrast to this, films composed both of highly isotactic butene-1 polymer and also of a butene-1 polymer which has been brought to the same ether-soluble fraction of 10 to 30% by the working up process, have substantially poorer values of resistance to tear propagation (page 3, left side, lines 16-22, emphasis added).

Therefore, the references, whether taken alone or in combination, do not teach, suggest or disclose the current claims. No reason has been identified, either in the references or in the Office Action, why one of skill in the art would have combined the disparate elements of the cited references in the manner claimed. *See* U.S. PTO Memorandum dated May 3, 2007, re: Supreme Court Decision on *KSR Int'l. Co. v. Teleflex, Inc.*, stating that "in formulating a

rejection under 35 U.S.C. § 103(a) based upon a combination of prior art elements, *it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed*."). And as noted by the Supreme Court in KSR, "*[t]*o facilitate review, this analysis should be made explicit." (U.S. PTO Memorandum citing KSR, citation omitted).

For the reasons stated above, Applicants respectfully request reconsideration and withdrawal of the Rejection by Examiner.

Should the Examiner have questions or comments regarding this application or this Amendment, Applicant's attorney would welcome the opportunity to discuss the case with the Examiner.

The Commissioner is hereby authorized to charge U.S. PTO Deposit Account 08-2336 in the amount of any fee required for consideration of this Amendment.

This is intended to be a complete response to the Office Action mailed October 4, 2007.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with sufficient postage thereon with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on March 28, 2008.

March 28 2008
Date of Signature

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